

PATENT COOPERATION TREATY

106

From the
INTERNATIONAL SEARCHING AUTHORITY

期限： / 月 30 E

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/JP2005/006553

International filing date (day/month/year)
29.03.2005

Priority date (day/month/year)
30.03.2004

International Patent Classification (IPC) or both national classification and IPC
H04B7/26

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2005/006553

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,7,8,14
Inventive step (IS)	Yes: Claims	
	No: Claims	2-6,8-13,16-31
Industrial applicability (IA)	Yes: Claims	1-31
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

WRITTEN OPINION OF THE
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AUTHORITY (SEPARATE SHEET)

International application No.

PCT/JP2005/006553

IAP5 Rec'd PCT/PTO 27 SEP 2006

Re Item V.

- 1 Reference is made to the following documents:

D1 : WO-A- 99/14885 (NOKIA).

The document D1 is considered as being the closest state of the art.

- 2 INDEPENDENT CLAIMS 1 AND 7

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1 and 7 is not new in the sense of Article 33(2) PCT.

Document D1 discloses a radio communication system using TDMA for dividing a time interval into N time slots and performing transmission of signals at each of the time slots (see claims 1 and 2 of D1). The system comprises a master station and slaves stations (a base and mobile stations, see claim 1 of D1). The signal is repeated in M time slots (M greater or equals to 1) and received by the slave stations (see claim 1 of D1) in synchronisation with a control signal (see claim 2 of D1).

The subject-matter of independent system claim 1 and corresponding independent method claim 7 is therefore not new (Article 33 PCT).

- 3 INDEPENDENT CLAIMS 8 and 14

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 8 and 14 is not new in the sense of Article 33(2) PCT.

Document D1 discloses a radio communication system using TDMA for dividing a time interval into N time slots and performing transmission of signals at each of the time slots (see claims 1 and 2 of D1). The system comprises a first radio communication station and second radio stations (a base and mobile stations, see claim 1 of D1). The signal

is repeated in M time slots (M greater or equals to 1) and received by the second radio station (see claim 1 of D1).

The subject-matter of independent system claim 8 and corresponding independent method claim 14 is therefore not new (Article 33 PCT).

4 INDEPENDENT CLAIM 15

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 15 does not involve an inventive step in the sense of Article 33(3) PCT

The subject-matter of independent claim 15 differs from D1 by having a system working in a duplex and in a simplex mode. In a duplex mode, two time slots are needed for transmission, a time slot for each direction of communication. In case of a simplex communication, two time slots can be used by the master station for transmission (a second one being not needed by the slave station for response). The master station is using the available time slots for redundancy in information transmission. The problem solved is reliability in transmission by repeatedly transmitting a signal. Document D1 solves the same problem using the same method in a radio mobile system. See claims 1 and 2 of D1.

The subject-matter of independent claim 15 lacks therefore inventive step (Article 33 PCT).

5 INDEPENDENT CLAIM 24

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 24 does not involve an inventive step in the sense of Article 33(3) PCT

The subject-matter of independent claim 24 is the application of the method disclosed in D1 to a door phone system. Information is repeated in time slots to increase reliability in transmission. Document D1 solves the same problem with the same method in a

radio mobile system. See claim 1 and 2 of D1.

The subject-matter of independent claim 24 lacks therefore inventive step (Article 33 PCT)

6 DEPENDENT CLAIMS 2-6, 9-13, 16-23, 25-31

Dependent claims 2-6, 9-13, 16-23, 25-31 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

Re Item VII.

Independent claims 1, 8, 15, 24 are system claims, independent claims 7, 14 are method claims. There should be only one independent claim per category for clarity reasons (Article 6 PCT) and to avoid non unity objections (Rule 13 PCT).

Re Item VIII.

The application does not meet the requirements of Article 6 PCT, because claims 1 and 7 are not clear.

- 1.1 Claim 1 states "communication of independent signals" in line 5, "a transmission signals (plural)" in line 9, "**divided** transmission signals" in line 11, "to receive one divided transmission signals (plural)" in line 27. It is not clear if one or a plurality of signals are transmitted and **received**. The same remark applies for claim 7.
- 1.2 The expression "**multiple** times repeatedly" is not clear. It is not clear if the signal is duplicated in a **plurality of** time slots or if a signal is repeated in a time slot a plurality of times. The same **remark** applies for claim 7.
- 1.3 The expression in **lines 26-27** of claim 1 : the slave station performs reception "for transmitting the **transmission** signal by the master station" is not clear.

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